

Gator™ Flex SA Kit - A Reactivable Streptavidin Probe Kit

Introduction

Many of the label-free biosensors have been regenerated successfully to reduce cost for drug research and discovery. However, extensive application of streptavidin biosensors is still hindered by the irreversible immobilization of the bait molecule, and the ability to use the same probe for different application is desirable for cost effective research.

Gator™ Flex SA Kit

Gator Bio's Gator™ Flex SA Kit is the first in the market to provide reactivable streptavidin probes with a reagent set. One probe can easily be used by different users with different applications, which makes it very useful for academics or for use in fully automated screening of different biomolecular interactions. The Gator™ platform enables researcher to monitor whole reactivation process rapidly and provides flexibility and confidence.



Performance Summary

- Remove both capture reagent and biotin-bait molecule and immobilize new capture reagent < 5 minutes
- Use with same or different biotinylated bait
- Can be re-used 10 times or more without loss of performance
- Automated reactivation
- Reagents can be stored at 4°C for up to 5 months

Results

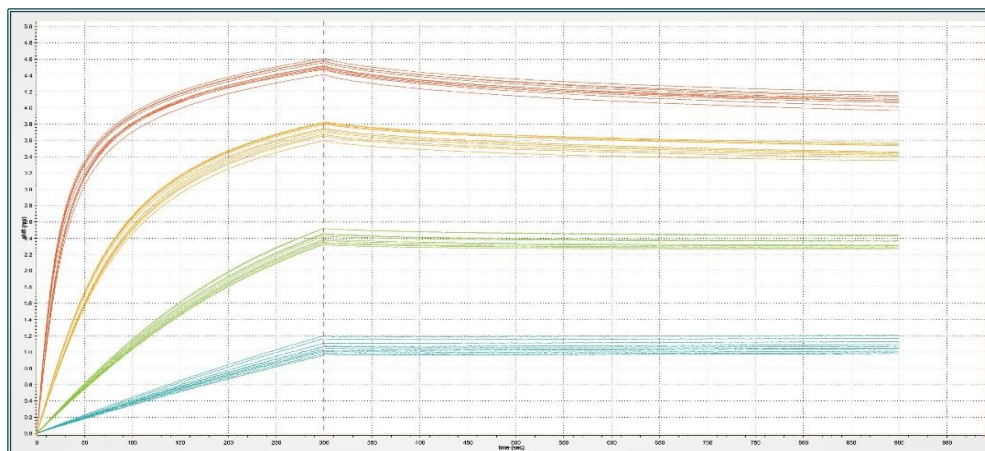
Loading height reproducibility

Three Flex SA probes were tested over 10 reactivations using biotinylated TNF- α at 1 μ g/mL. The table below shows CV < 5.0% suggesting excellent loading height reproducibility.

Biotinylated TNF- α Loading Height			
	Probe 1 (n=10)	Probe 2 (n=10)	Probe 3 (n=10)
Loading height avg (nm)	0.66	0.67	0.62
Loading height SD	0.03	0.03	0.03
Loading height % CV	4.54	4.09	5.4

Reproducibility of K_D over 10 reactivations using the same bait

Kinetics was evaluated using biotinylated TNF α and anti-TNF α antibody using a 5 min 1000 rpm pre-wet in K buffer and capture of Flex SA Capture Reagent (SA-CR). The biotinylated TNF- α was loaded onto the sensor, then exposed to association and dissociation of 10, 30, 100 and 300 nM anti TNF- α antibody. Global-fit analysis using Gator Bio software for the TNF- α binding interaction with anti- TNF- α resulted in $K_D = 7.63E-10$ M.



K_D measurements for different proteins over 10 reactivations

The same probe was tested with 2 different proteins over 10 reactivations. A CV < 5% was observed for both proteins.

Bait 1 - PDL1	
Reactivation 1	2.00E-10
Reactivation 3	1.08E-10
Reactivation 5	1.17E-10
Reactivation 7	1.06E-10
Reactivation 9	0.40E-10
Average	1.14E-10

Bait 2- CRP	
Reactivation 2	4.77E-10
Reactivation 4	4.28E-10
Reactivation 6	3.88E-10
Reactivation 8	3.49E-10
Reactivation 10	3.22E-10
Average	3.93E-10

Gator Bio Total Solution

Gator™ Flex SA kit



+

Gator™ Prime

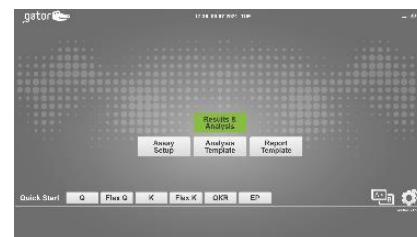
OR

Gator™ Plus



+

Gator Bio Software



Ordering info

PL168-350001: Gator™ Flex SA Kit